

Organisms and their Environment

Question Paper

Level	IGCSE
Subject	Biology
Exam Board	CIE
Topic	Organisms and their environment
Sub-Topic	
Paper Type	Alternative to Practical
Booklet	Question Paper

Time Allowed: 14 minutes

Score: /11

Percentage: /100

1 Fig 3.1 shows a choice chamber.

- This apparatus can be used to study the behaviour of small invertebrates, such as woodlice, in different conditions.
- 60 woodlice were introduced through the central hole.
- The four sections of the choice chamber had different conditions as shown in Fig. 3.1.

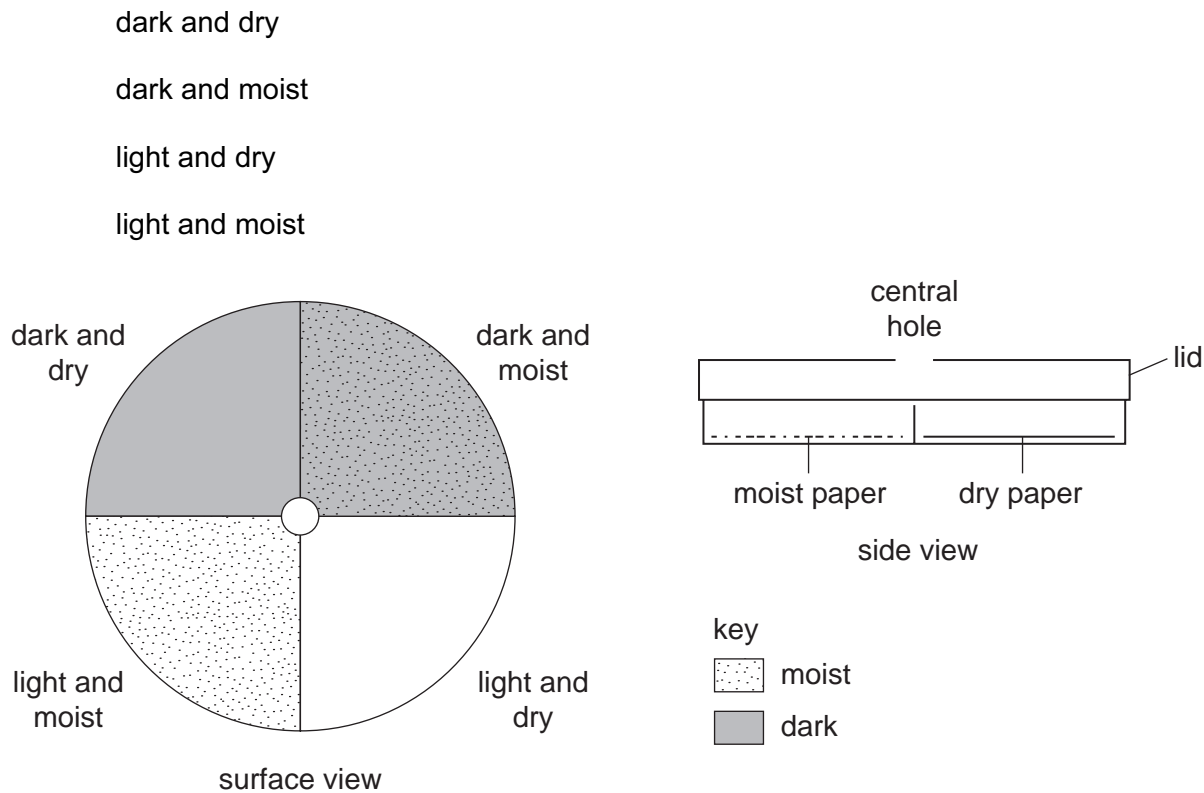


Fig. 3.1

- The choice chamber was left undisturbed for 10 minutes.
- The numbers of woodlice in each section were counted.
- The numbers were recorded in Table 3.1.
- These woodlice were released into their natural environment.
- The investigation was repeated with three more samples of woodlice.

(a) (i)

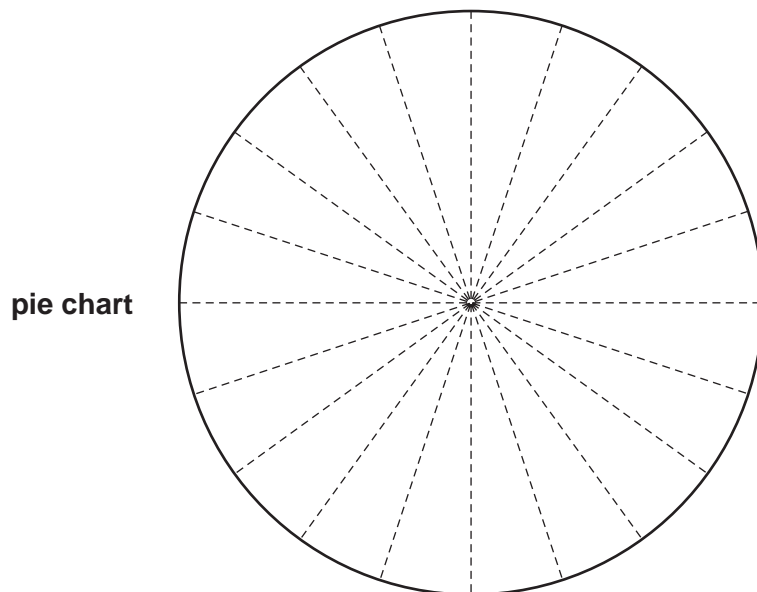
Table 3.1

sample of woodlice	dark and dry	dark and moist	light and dry	light and moist
1st	8	47	1	4
2nd	4	56	0	0
3rd	5	52	1	2
4th	7	49	2	2
total	204	8
average	51	2

Complete Table 3.1. The calculations for the moist sections have been completed for you.

[2]

(ii) Plot the average number of woodlice in each condition on the **pie chart** below.



[3]

(b) (i) State which conditions the woodlice prefer.

..... [1]

(ii) Suggest how this behaviour might help the woodlice to survive in their natural habitat.

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..... [2]

(c) Suggest how you could improve this investigation to make the results more reliable.

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..... [3]

[Total 11]